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DIALOG(R)File 351:Derwent WPI

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WPI Acc No: 2000-019508/200002

XRPX Acc No: N00-015624

Electronic control apparatus of gas engine using natural gas as fuel  
- has injection control unit which controls injection completion stage of  
fuel injection valve of each air cylinder near TDC of suction stroke of  
piston of each air cylinder

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Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11294222	A	19991026	JP 98104337	A	19980415	200002 B

Priority Applications (No Type Date): JP 98104337 A 19980415

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11294222	A		7 F02D-041/02	

Abstract (Basic): JP 11294222 A

NOVELTY - The control is provided with a ECU (33) which controls  
fuel injection quantity and timing of fuel injection valve (19) of  
each air cylinder. The control unit controls the injection completion  
stage of fuel injection valve of each air cylinder within plus or minus  
100 deg. of TDC of suction stroke of piston of each air cylinder.

DETAILED DESCRIPTION - The fuel injection valve which injects gaseous  
fuel , is provided to a suction port (18) of each air cylinder.  
Injected fuel is sucked into the combustion chamber before the injected  
fuel spreads in a wide area within an inlet pipe (20). A fuel pressure  
regulator (31) is provided for adjusting the injection pressure at 5 or  
less kgf/cm2 within 3.5-4.5 kgf/cm2.

USE - For controlling gas engine.

ADVANTAGE - Reduces exhaust emission and raises convergency of air  
fuel ratio at acceleration-deceleration time. DESCRIPTION OF DRAWING(S)  
- The figure shows a part of control system of gas engine. (18) Suction  
port; (19) Fuel injection valve; (20) Inlet pipe; (31) Fuel pressure  
regulator; (33) ECU/injection control unit.

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Title Terms: ELECTRONIC; CONTROL; APPARATUS; GAS; ENGINE; NATURAL; GAS;  
FUEL; INJECTION; CONTROL; UNIT; CONTROL; INJECTION; COMPLETE; STAGE; FUEL  
; INJECTION; VALVE; AIR; CYLINDER; TDC; SUCTION; STROKE; PISTON; AIR;  
CYLINDER

Derwent Class: Q52; Q53; X22

International Patent Class (Main): F02D-041/02

International Patent Class (Additional): F02M-021/02

File Segment: EPI; EngPI